

HITACHI

PROJECTION COLOR TV

50UX58B - 50UX58K
60UX58B - 60UX58K
55UX58B

OPERATING GUIDE

TABLE OF CONTENTS

IMPORTANT	2
SAFETY TIPS.....	3
PICTURE CAUTIONS.....	6
ACCESSORIES.....	7
REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT	7
HOW TO SET UP YOUR NEW HITACHI PROJECTION TV	8
HOOK-UP CABLES AND CONNECTORS.....	8
ANTENNA CONNECTIONS TO REAR JACK PANEL.....	9
FRONT PANEL CONTROLS.....	10
FRONT VIEW	10
FRONT PANEL JACKS AND CONNECTIONS.....	11
REAR PANEL JACKS	11
REAR PANEL CONNECTIONS	12
TIPS ON REAR PANEL CONNECTIONS.....	12
EXTERNAL CONNECTIONS	12
CONNECTING EXTERNAL AUDIO AMPLIFIER.....	12
CONNECTING EXTERNAL VIDEO SOURCES.....	13
CONNECTING A STEREO VCR OR STEREO LASERDISC PLAYER	14
CONNECTING A STEREO LASERDISC PLAYER OR DVD PLAYER TO INPUT 2.....	14
AUDIO SYSTEM SETUP	15
THE GENIUS REMOTE CONTROL (CLU-612MP).....	15
MULTI-PAGE WINDOWS.....	16
HOW TO USE THE GENIUS REMOTE TO CONTROL YOUR TV	17
PICTURE-IN-PICTURE (PIP).....	18
USING THE REMOTE TO CONTROL VCR FUNCTIONS	20
USING THE REMOTE TO CONTROL CABLE BOX/SATELLITE FUNCTIONS	21
USING THE REMOTE TO CONTROL AUDIO EQUIPMENT FUNCTIONS	22
AUDIO, CABLE/SATELLITE, AND VCR CODES.....	22
ULTRATEC OSD.....	27
SET UP	29
CUSTOM.....	31
VIDEO	36
AUDIO	37
THEATER	39
INFO	40
CARE OF YOUR HITACHI PROJECTION TV AND YOUR REMOTE CONTROL.....	42

RECEPTION PROBLEMS.....	42
USEFUL INFO.....	43
Back Cover.....	45
WARRANTY.....	45

IMPORTANT

Follow all warnings and instructions marked on this projection television.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS TELEVISION SYSTEM TO RAIN OR MOISTURE.

NOTE: • There are no user serviceable parts inside the television.

- Model number and serial number are indicated on back side of the television.
- This television is not intended for use in a computer room.

CAUTION: Adjust only those controls that are covered in the instructions, as improper changes or modifications not

expressly approved by HITACHI could avoid the user's authority to operate the TV

POWER SOURCE:

This projection television is designed to operate on 120 volts 60 Hz, AC household current.

Insert power cord into a 120 volt 60 Hz outlet.

TO PREVENT ELECTRIC SHOCK, DO NOT USE THE TELEVISION'S PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES AND GROUND TERMINAL CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NEVER CONNECT THE TV TO 50 Hz, DIRECT CURRENT, OR ANYTHING OTHER THAN THE SPECIFIED VOLTAGE.

NOTE: This television receiver will display television closed captioning ( or ) in accordance with paragraph 15, 119 of the FCC rules.



CAUTION: Never remove the back cover of the television as this can expose you to very high voltages and other hazards. If the set does not operate properly, unplug the set and call

your dealer or service shop.

SAFETY TIPS

IMPORTANT SAFEGUARDS

SAFETY POINTS YOU SHOULD KNOW ABOUT YOUR HITACHI PROJECTION TELEVISION

CAUTION:

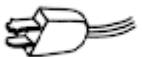
- Read all of these instructions.
- Save these instructions for later use.
- Follow all warnings and instructions marked on the television.

Our reputation has been built on the quality, performance, and ease of service of HITACHI televisions.

Safety is also foremost in our minds in the design of these units. To help you operate these products properly, this section illustrates safety tips which will be of benefit to you. Please read it carefully and apply the knowledge you obtain from it to the proper operation of your HITACHI television.

Please fill out your warranty card and mail it to HITACHI. This will enable HITACHI to notify you promptly in the improbable event that a safety problem should be discovered in your product model.

FOR YOUR PERSONAL SAFETY



1 This television is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.



2 When the power cord or plug is damaged or frayed, unplug this television set from the wall outlet and refer servicing to qualified service personnel.



3 Do not overload wall outlets and extension cords as this can result in fire or electric shock.



4 Do not allow anything to rest on or roll over the power cord, and do not place the television where the power cord is subject to traffic or abuse. This may result in a shock or fire hazard.



5 Do not attempt to service this television set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.



6 Never push objects of any kind into this television set through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the television set.



7 If the television has been dropped or the cabinet has been damaged, unplug this television set from the wall outlet and refer servicing to qualified service personnel.



8 If liquid has been spilled into this television set, unplug it from the wall outlet and refer service to qualified service personnel.



9 Do not subject your television to impact of any kind. Be particularly careful not to damage the picture tube surface.



10 Unplug this television from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.



11-1 Do not place the television on an unstable cart, stand, or table. The television may fall, causing serious injury to a child or an adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer, or sold with the television. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.



11-2 An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

PROTECTION AND LOCATION OF YOUR SET

12 Do not use this television near water, for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.



• Never expose the television to rain or water. If the set has been exposed to rain or water, unplug the set from the wall outlet and refer servicing personnel.



13 Choose a place where light (artificial or sunlight) does not shine directly on the screen.



14 Avoid dusty places, since accumulated dust inside the chassis may cause failure of the set when high humidity

persists.

15 The television has slots, or openings in the cabinet for ventilation purposes, to provide reliable operation of the receiver, and to protect from overheating. These openings must not be blocked or covered.



- Never cover the slots or openings with cloth or other material.



- Never block the bottom ventilation slots of the set by placing it on a bed, sofa, rug, etc.



- Never place the set near or over a radiator or heat register.



- Never place the set in a "built-in" enclosure, unless proper ventilation provided.

PROTECTION AND LOCATION OF YOUR SET

16-1 If an outside antenna is connected to the television set, be sure the antenna system is protected against voltage surges and built up static charges, Section 810 of the National Electrical Code, NFPA No. 70-1975, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrode, and requirements for the grounding electrode.

ANTENNA GROUNDING DIAGRAM AS PER NATIONAL ELECTRICAL CODE INSTRUCTIONS .

16-2 **Note to CATV system installer:** (Only for television with CATV reception) This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

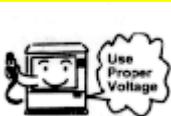


17 An outside antenna system should not be located in the vicinity of overhead power lines or other electrical lights or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.



18 For added protection for the television during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage due to lightning and power-line surges.

OPERATION OF YOUR SET



19 This television should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply at your home, consult your television dealer or local power company. For television sets designed to operate from battery power, refer to the operating instructions.



20 If the television does not operate normally by following the operating instructions, unplug this set television set from the wall outlet and refer servicing to qualified service personnel. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the television set to normal operation.



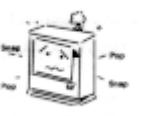
21 If your television is to remain unused for a period of time, (such as when going on a holiday), turn the television OFF and unplug it from the wall outlet.

IF THE TELEVISION DOES NOT OPERATE PROPERLY



22 If you are unable to restore normal operation by following the detailed procedure in your operating instructions, do not attempt any further adjustment. Unplug the television and call your dealer or service technician.

23 Whenever the television is damaged or fails, or a distinct change in performance indicates a need for service, unplug the set and have it checked by a professional service technician.



24 It is normal for some televisions to make occasional snapping or popping sounds, particularly when being turned on or off. If the snapping or popping is continuous or frequent, unplug the set and consult your dealer or service technician.

FOR SERVICING AND MODIFICATION



25 Do not use attachments not recommended by the television set manufacturer as they may cause hazards.

26 When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.



27 Upon completion of any service or repairs to the television set, ask the service technician to perform routine safety checks to determine that the television is in safe operating condition.

PICTURE CAUTIONS

Picture Burn Prevention

- Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to projection television receivers. Such "PATTERN BURNS" constitute misuse and are NOT COVERED by your HITACHI Factory Warranty.

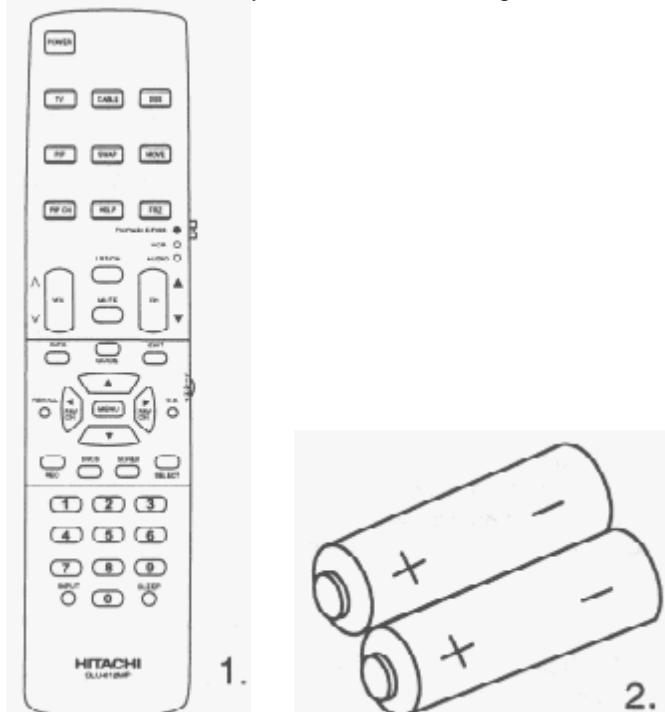
- When using Picture-in-Picture function, the sub-picture should not be left permanently in one corner of the screen or a "PATTERN BURN" may develop over a long period of time.

Public Viewing of Copyrighted Material

Public viewing of programs broadcast by TV stations and cable companies, as well as programs from other sources, may require prior authorization from the broadcaster or owner of the video program material.

ACCESSORIES

Check to make sure you have the following accessories before disposing of the packing material.

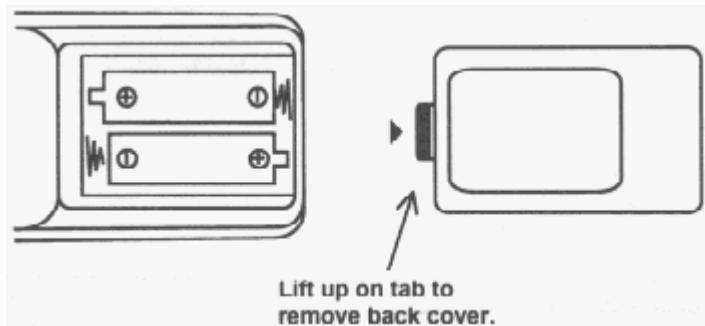


1. Remote Control Unit CLU-612MP (Part No. HL00712)
2. Two "AA" size, 1.5V batteries (For Remote Control Unit).

REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

1. Open the battery cover of the remote control by pushing the notched part of the cover with your fingers and pulling the cover off.
2. Insert two new "AA" size batteries for the remote control. When replacing old batteries, push them towards the springs and lift them out.
3. Match the batteries to the (+) and (-) marks in the battery compartment.
4. Replace the cover.

BOTTOM VIEW



HOW TO SET UP YOUR NEW HITACHI PROJECTION TV

ANTENNA

Unless your TV is connected to a cable TV system or to a centralized antenna system, a good outdoor color TV antenna is recommended for the best performance. However, if you are located in an exceptionally good signal area that is free from interference and multiple image ghosts, an indoor antenna may be sufficient.

LOCATION

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows free flow of air to and from the perforated back cover of the set.

To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot, for example, in direct sunlight or near a heating appliance, etc.

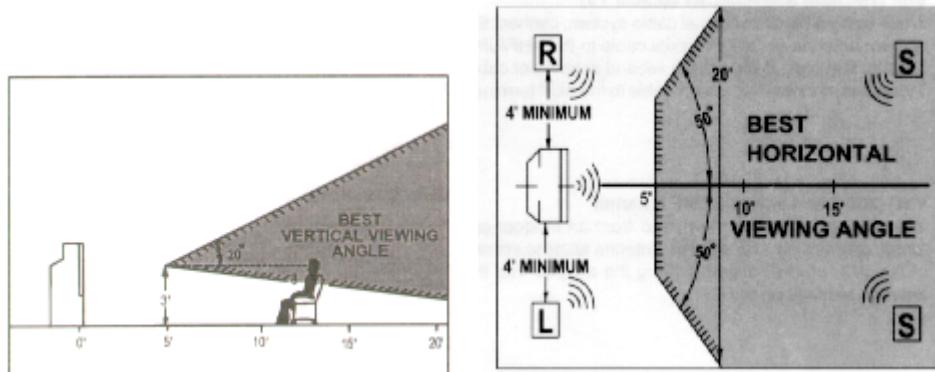
VIEWING

The major benefit of the HITACHI Projection Television is its large viewing screen. To see this large screen at its best, test various locations in the room to find the best spot for viewing.

The best picture is seen by sitting directly in front of the TV and about 10 to 18 feet from the screen. Picture brightness decreases as the viewer moves to the left or right of the receiver.

During daylight hours, reflections from outside light may appear on the screen. If so, drapes or screens can be used to reduce the reflection or the TV can be located in a different section of the room.

If the TV's audio output will be connected to a Hi-Fi system's external speakers, the best audio performance will be obtained by placing the speakers equidistant from each side of the receiver cabinet and as close as possible to the height of the picture screen center. For best stereo separation, place the external speakers at least 4 feet from the side of the TV. Place the surround speakers to the side or behind the viewing area. Differences in room sizes and acoustical environments will require some experimentation with speaker placement for best performance.

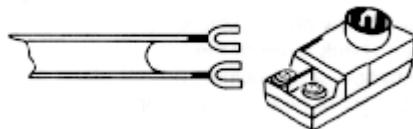


CAUTION: Magnetic fields, such as those of external speakers, may cause the picture to distort if they are placed too close to the television. Move the magnetic field source away from the television until there is no picture distortion.

HOOK-UP CABLES AND CONNECTORS

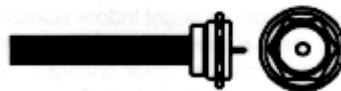
Most video/audio connections between components can be made with shielded video and audio cables that have phono connectors. For best performance, video cables should use 75-Ohm coaxial shielded wire. Cables can be purchased from most stores that sell audio/video products. Below are illustrations and names of common connectors. Before purchasing any cables, be sure of the output and input connector types required by the

various components and the length of each cable.



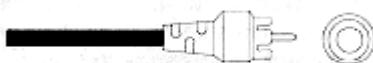
300-Ohm Twin Lead Connector

This outdoor antenna cable must be connected to an antenna adaptor (300-Ohm to 75-Ohm).



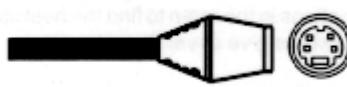
"F" Type 75-Ohm Coaxial Antenna Connector

For connecting RF signals (antenna or cable TV) to the antenna jack on the television.



Phono Connector

Used on all standard video and audio cables which connect to inputs and outputs located on the television's rear jack panel and front control panel.



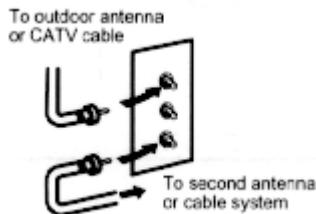
S-Video (Super Video) Connector

This connector is used on camcorders, VCRs, and laser disc players with an S-Video feature in place of the standard video cable to produce a high-quality picture.

ANTENNA CONNECTIONS TO REAR JACK PANEL

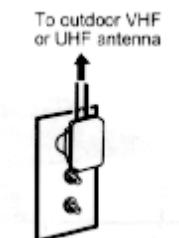
VHF (75-Ohm) antenna/CATV(cable TV)

When using a 75-Ohm coaxial cable system, connect the outdoor antenna or CATV coaxial cable to the ANT A (75-Ohm) terminal. If you have a second antenna or cable TV system, connect the coaxial cable to the ANT B terminal.



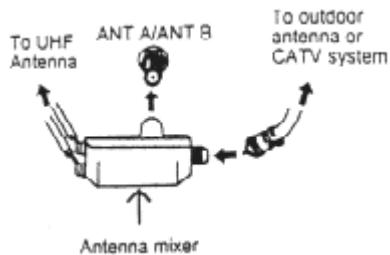
VHF (300-Ohm) antenna/UHF antenna

When using a 300-Ohm twin lead from an outdoor antenna, connect the VHF or UHF antenna leads to screws of the VHF or UHF adaptor. Plug the adaptor into the antenna terminal on the TV.



When both VHF and UHF antennas are connected

Attach an optional antenna cable mixer to the TV antenna terminal, and connect the cables to the antenna mixer. Consult your dealer or service store for the antenna mixer.



FRONT PANEL CONTROLS

FRONT VIEW

Front Panel Diagram Illustration

1 MENU button

This button allows you to enter the MENU, making it possible to set TV features to your preference without using the remote.

2 INPUT/EXIT button

Press this button to select the current antenna source, VIDEO: 1, 2, 3 or alternate antenna source. Your selection is shown in the top right corner of the screen. This button also serves as the EXIT button when in MENU mode.

3 CHANNEL selector

Press these buttons until the desired channel appears in the top right corner of the TV screen. These buttons also serve as the cursor down (▼) and up (▲) buttons when in MENU mode.

4 VOLUME level

Press these buttons for your desired sound level. The volume level will be displayed on the TV screen. These buttons also serve as the cursor left (◀) and right (▶) buttons when in MENU mode.

5 POWER button

Press this button to turn the TV on or off.

NOTE: Your HITACHI Projection TV will appear to be turned OFF if there is no video input when VIDEO: 1, 2 or 3 is selected. Check the Power Light to make sure the TV is off when not in use.

To see an auto-demonstration of the on-screen displays with HELP text displayed, press and hold the

POWER button on the TV set for approximately five seconds. Press the POWER button on the TV again to end the auto-demonstration.

6 POWER light

You will see a red light when the TV is turned on.

7 AI (Artificial Intelligence) sensor

The Artificial Intelligence sensor will make automatic picture adjustments depending on the amount of light in the room to give the best picture. (See page 49.)

8 REMOTE CONTROL sensor

Point your remote at this area when selecting channels, adjusting volume, etc.

9 MAGIC FOCUS

Use this button to adjust your picture quality to optimum performance. (See page 40.)

10 FRONT INPUT JACKS (for VIDEO: 3)

Use these audio/video jacks for a "quick" hook-up from a camcorder or VCR to instantly view your favorite show or new recording. Press the INPUT button until VIDEO: 3 appears in the top right corner of the TV screen. If you have mono sound, insert the audio cable in to the left channel jack.

FRONT PANEL JACKS AND CONNECTIONS

The front panel jacks are provided as a convenience to allow you to easily connect a camcorder or VCR as shown in the following examples:

Front Panel Jacks and Connections Illustration

NOTE: Completely insert connection cord plugs when connecting to front panel jacks. If you do not, the played back picture may be abnormal. If you have a S-VHS VCR, use the S-INPUT cable in place of the standard video cable.

If you have mono VCR, insert the audio cable into the left channel jack.

REAR PANEL JACKS

Rear Panel Jacks Illustration

1 Antenna Input/Output

The remote control allows you to switch between two separate 75-Ohm RF antenna inputs, ANT A and ANT B. ANT A input can be displayed as a main picture or sub-picture. ANT B can only be displayed as a main picture. (ANT B cannot be displayed as a sub-picture.) The antenna output labeled "TO CONVERTER" allows the ANT A connection to pass directly to a different source such as a cable box, when ANT B is displayed as a main picture.

2 Audio/Video Inputs 1, 2

The INPUT button will step through each video source and antenna source input each time it is pressed. Use the audio and video inputs to connect external devices, such as VCRs, camcorders, laserdisc players, etc. (If you have mono sound, insert the audio cable into the left channel jack.)

Note: You may use VIDEO, S-VIDEO, or COMPONENT: Y-CbCr inputs to connect to Input 2, note that only one of these may be used at a time.

3 Monitor Out

These jacks provide fixed audio and video signals which are used for recording.

4 Wireless Out

These jacks provide variable audio output to a set of wireless speakers. They can also be used for another stereo system amplifier. With this connection, the audio can be controlled by the television's main volume and also by an independent volume feature found in the THEATER-WIRELESS SOUND menu.

5 Audio to Hi-Fi

These jacks provide variable audio output to a separate stereo amplifier. With this connection, the audio to the stereo can be controlled by the television's main volume. Use these jacks for the SURROUND Left and Right channels. (See page 17.)

6 S-Video Inputs 1 and 2

Inputs 1 and 2 provide S-Video (Super Video) jacks for connecting equipment with S-Video output capability.

7 Component: Y-CbCr Input 2

Input 2 provides Y-CbCr jacks for connecting equipment with this capability, such as a DVD player.

Note: DO NOT connect standard VIDEO or S-VIDEO to Input 2 when using Y-CbCr input.

When using the Y-CbCr input jacks, connect your components audio output to the TV's Input 2 Left and Right Audio input jacks.

Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's Cb input and the components R-Y output to the TV's Cr input.

It may be necessary to adjust TINT or turn AUTO COLOR-ON to obtain optimum picture quality when using the Y-CbCr inputs. (See pages 49 and 50)

To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-CbCr jacks.

When using the Y-CbCr jacks, Input 2 will be viewed as a blank PIP sub-picture. (See page 24.)

REAR PANEL CONNECTIONS

Rear Panel Connections Illustration

Typical full feature setup. Follow connections that pertain to your personal entertainment system.

TIPS ON REAR PANEL CONNECTIONS

S-Video connections are provided for high performance laserdisc players, VCRs etc. that have this feature. Use this connection in place of the standard video connection if your device has this feature.

If your device has only one audio output (mono sound), connect it to the left audio jack on the television.

Refer to the operating guide of your other electronic equipment for additional information on connecting your hook-up cables.

A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output (INPUT: 1 in the example on page 12.) Refer to your VCR operating guide for more information on line input-output connections.

You may use Video, S-VIDEO, or COMPONENT: Y-CbCr inputs to connect to Input 2, but note that only one of these may be used at a time.

Connect only 1 component to each input jack.

COMPONENT: Y-CbCr connections are provided for high performance components, such as DVD players. Use these connections in place of the standard video connection if your device has this feature.

When using the Y-CbCr input jacks, connect your components audio output to the TV's Input 2 Left and Right Audio input jacks.

Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's Cb input and the components R-Y output to the TV's Cr input.

It may be necessary to adjust TINT or turn AUTO COLOR-ON to obtain optimum picture quality when using the Y-CbCr inputs. (See page 49 and 50.)

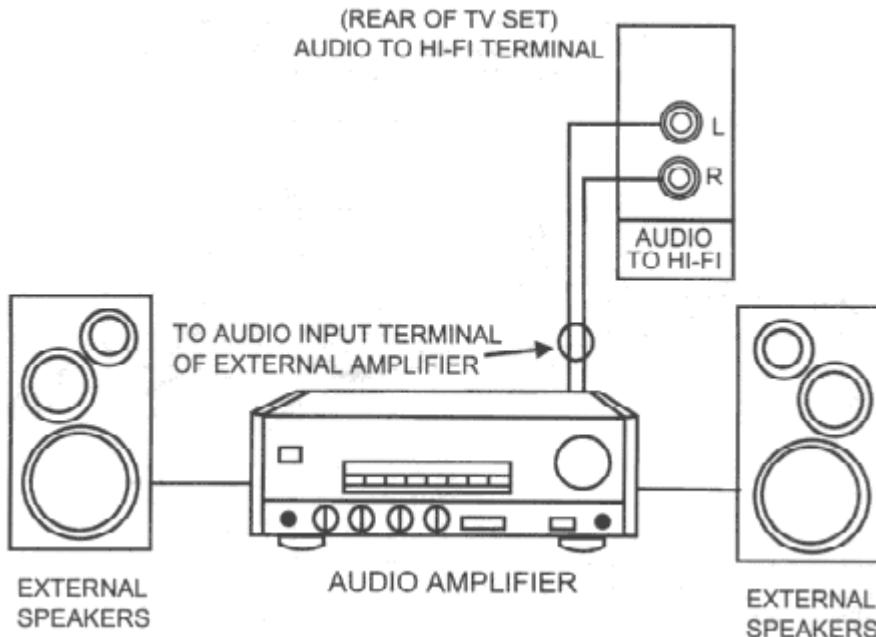
To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-CbCr jacks.

When using the Y-CbCr jacks, Input 2 will be viewed as a blank PIP sub-picture. (See page 24.)

EXTERNAL CONNECTIONS

CONNECTING EXTERNAL AUDIO AMPLIFIER

To control the audio level of an external audio amplifier with the remote control, connect the system as shown below.



NOTE: To prevent damage to the speaker and distorted sound, set the volume control of the audio amplifier lower and adjust the sound using the remote control of the TV set.

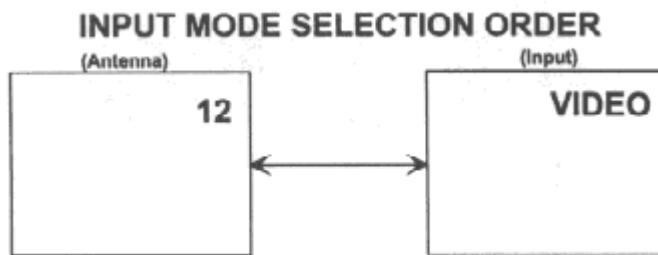
CONNECTING EXTERNAL VIDEO SOURCES

The exact arrangement you use to connect the VCR, camcorder, and laserdisc player, and DVD player to your TV set is dependent on the model and features of each component. Check the owner's manual of each component for the location of video and audio inputs and outputs.

The following connection diagrams are offered as suggestions. However, you may need to modify them to accommodate your particular assortment of components and features. For best performance, video and audio cables should be made from coaxial shielded wire.

Before Operating External Video Source

The input mode is changed every time the INPUT button is pressed as shown below. Connect an external source to the INPUT terminal, then press the INPUT button as necessary to view the input source. (See page 23.)

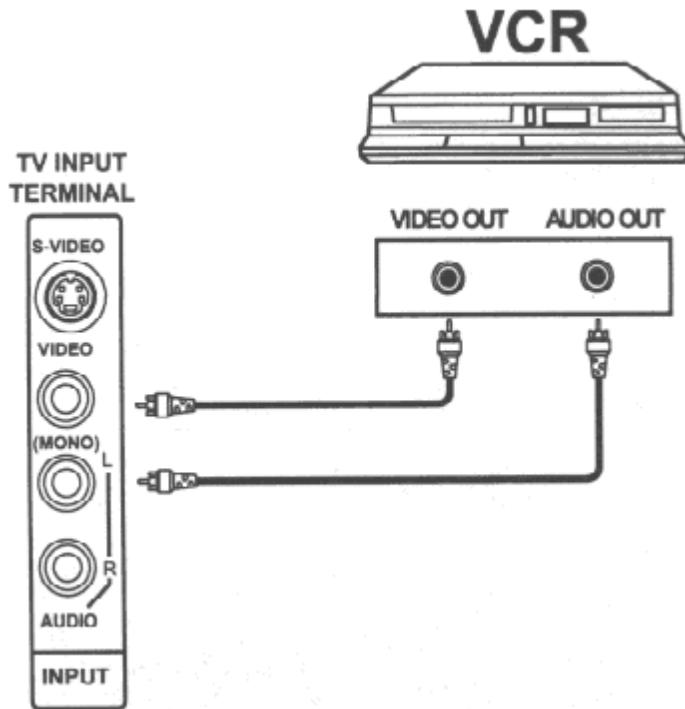


NOTE: When the TV is set to VIDEO and a video signal is not received from the VIDEO INPUT JACK on the jack panel of the TV (i.e., VCR/laserdisc player, etc. is not connected or the video device is OFF), the set will appear to be OFF.

CONNECTING A MONAURAL AUDIO VCR OR LASERDISC PLAYER

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack on the TV set below.
2. Connect the cable from the AUDIO OUT of the VCR or the laserdisc player to the INPUT (MONO)/L(AUDIO) jack.

3. Press the INPUT button to view the program from the VCR or the laserdisc player. The VIDEO mode disappears automatically after approximately eight seconds.
4. Press the INPUT button to return to the previous channel.



CONNECTING A STEREO VCR OR STEREO LASERDISC PLAYER

1. Connect the cable from the ⁱⁱ AUDIO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack on the TV set below.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the INPUT button to view the program from the VCR or laserdisc player. The mode VIDEO disappears automatically after approximately eight seconds.
5. Press the INPUT button to return to the previous channel.

Connection of Stereo VCR Illustration

NOTE: Completely insert the connection cord plugs when connecting to rear panel jacks. The picture that is played back will be abnormal if the connection is loose.
 If you have an S-VHS VCR, use the S-INPUT cable in place of the standard video cable.
 A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output. (INPUT: 1 in the example on page 12.) Refer to your VCR operating guide for more information on line input-output connections.

CONNECTING A STEREO LASERDISC PLAYER OR DVD PLAYER TO INPUT 2.

1. Connect the cable from the Y OUT of the Laserdisc or the DVD player to the INPUT 2 (Y) jack as shown on the TV set below.
2. Connect the cable from the Cb OUT or B-Y OUT of the Laserdisc or the DVD player to the INPUT 2 (Cb) jack, as shown on the TV set below.
3. Connect the cable from the Cr OUT or R-Y OUT of the Laserdisc or the DVD player to the INPUT 2 (Cr) jack, as shown on the TV set below.
4. Connect the cable from the AUDIO OUT R of the Laserdisc or DVD player to the INPUT 2 (AUDIO/R) jack.

5. Connect the cable from the AUDIO OUT L of the Laserdisc or DVD player to the INPUT 2 (AUDIO/L) jack.
6. Press the INPUT button until VIDEO:2 appears, to view the program from the Laserdisc or DVD player. The mode VIDEO:2 disappears automatically after approximately eight seconds.
7. Press the INPUT button to return to the previous channel.

Laserdisc or DVD player Hook-up Illustration.

NOTE: Completely insert the connection cord plugs when connecting to the rear panel jacks. The picture that is played back will be abnormal if the connection is loose.
See page 13 for tips on REAR PANEL CONNECTIONS.

AUDIO SYSTEM SETUP

Match the numbers below to the diagrams for speaker placement (See page 54 for SRS functions.)

1. The television's internal speakers.
2. These speakers are connected to a separate audio amplifier. Use the AUDIO TO HI-FI output on the TV.
3. These speakers are controlled by a wireless speaker transmitter. Use the WIRELESS OUT output on the TV.

Audio System Setup Illustration

SRS () FEATURE	REQUIRED CONNECTION	OPTICAL CONNECTION	EFFECT
ON	①	② ③	Exciting and realistic 3D sound experience from just two speakers.
OFF	①	② ③	Receive mono and stereo sound

THE GENIUS REMOTE CONTROL (CLU-612MP)

In addition to controlling all the functions on your HITACHI Projection TV, the remote control is designed to operate different types of VCRs, CATV (cable TV)/satellite converters, and audio equipment with one touch. Basic operation keys are grouped together in one area. All other controls are separated from them and arranged in MULTI-PAGE sections, with a display that can be switched to cover any of the three pages. Functions are arranged and properly categorized into windows, making operation simple when multiple functions are to be controlled.

To operate your TV, slide the MULTI-PAGE select switch on the side of the remote to TV/CABLE/DSS mode. Press the TV button and the remote will now control your TV.

To operate your cable box, slide the MULTI-PAGE select switch on the side of the remote to TV/CABLE/DSS mode. Press the CABLE button and the remote will now control your cable box. (See page 28 for instructions on how to program the remote to control your cable box.)

To operate your satellite box, slide the MULTI-PAGE select switch on the side of the remote to TV/CABLE/DSS mode. Press the DSS button and the remote will now control your satellite box. (See page 28 for instructions on how to program the remote to control your satellite box.)

To operate your VCR, slide the MULTI-PAGE select switch on the side of the remote to VCR mode. The remote will now control your VCR. (See page 27 for instructions on how to program the remote to control your VCR.)

To operate your audio equipment, slide the MULTI-PAGE select switch on the side of the remote to AUDIO mode. Press the button which corresponds to the component you would like to control (AMP, CD, TAPE). The remote

will now control your audio equipment. (See page 29 for instructions on how to program the remote to control your audio equipment.)

Genius Remote Control Illustration.

1 MULTI-PAGE select switch

This selects the button layout of the multi-page section of the remote control.

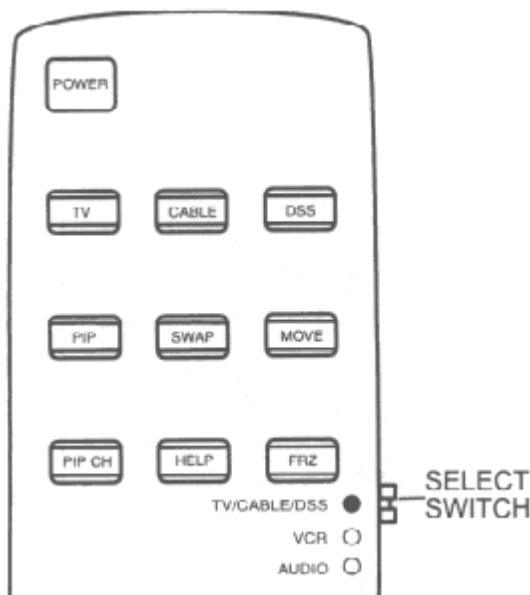
2 MULTI-PAGE buttons

These buttons change functions as shown on page 20.

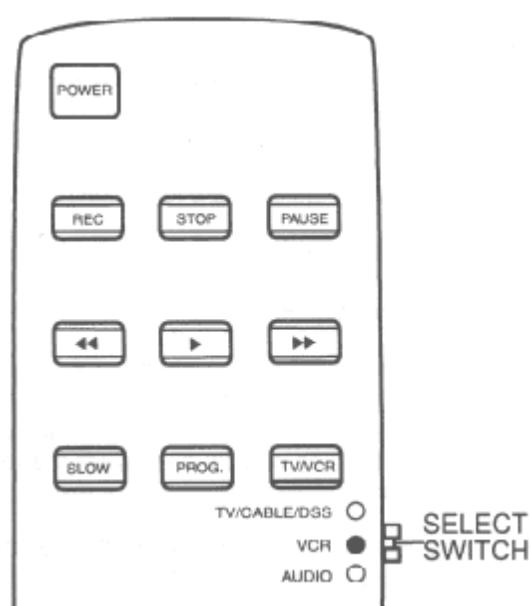
3 LIGHT BUTTON

When you are in a dark room, press this button on the side of the remote to light up the buttons shown in (4). The light will stay on for about 8 seconds if the light button is not pressed again. These buttons will not appear to light if the room is too bright.

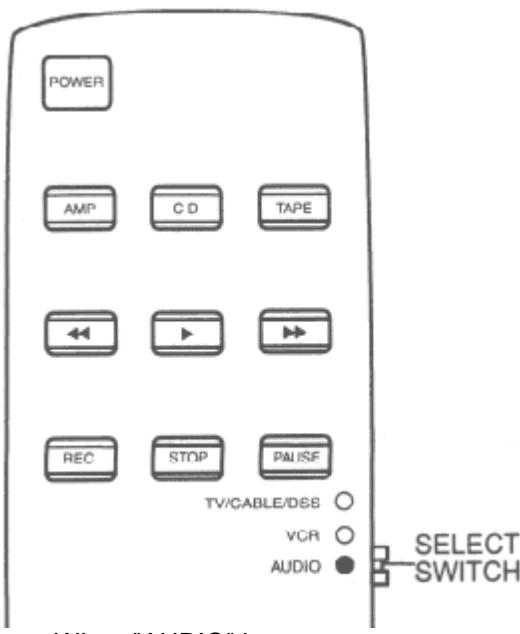
MULTI-PAGE WINDOWS



When "TV/CABLE/DSS" is set.



When "VCR" is set.



When "AUDIO" is set.

HOW TO USE THE GENIUS REMOTE TO CONTROL YOUR TV

Genius Remote Control Illustration.

1 POWER button

Press this button to turn the TV set on or off when the remote is in TV mode. (See page 19 for instructions on how to set the remote control to TV mode.) If a Special Event Reminder is set, it will be displayed when the TV is first turned on. (See page 56.)

2 TV button

Press this button to allow the remote to control your TV.

3 CABLE button

Press this button to allow the remote to control your cable box. (See page 28.)

4 DSS button

Press this button to allow the remote to control your satellite box. (See page 28.)

5 PICTURE-IN-PICTURE buttons

See separate section on page 24 for a description.

6 PIP CH button

Use the PIP CH button to select between main picture and sub-picture tuning. A blue highlight of the channel number will indicate which channel is being controlled.

7 HELP button

Press this button when a menu is displayed to view HELP text, which give a description of the displayed menu. The HELP text will be displayed every time a MENU is displayed, until this button is pressed again or the AUTO HELP FUNCTION is set to OFF. (See page 58.)

Help Button Illustration

8 LAST CHANNEL (LST-CH) button

Use this button to select between the last two channels viewed. (Good for watching two sporting events, etc.)

Last Channel Illustration

9 VOLUME, MUTE buttons

Press the VOLUME up (^) or down (v) button until you obtain the desired sound level.

To reduce the sound to one half of normal volume (SOFT MUTE) to answer the telephone, etc., press the MUTE button again to turn the sound off completely (MUTE). To restore the sound, press the

MUTE button one more time, or press the VOLUME up (^) button.

Volume, Mute Illustration

10 CHANNEL SELECTOR buttons

CHANNEL SELECTOR buttons are used to set Family Favorites, Channel Memory, etc..

Enter two or three numbers to select channels. Enter "0" first for channels 1 to 9 . For channels 100 and above, press the "1" button, wait until another dash appears next to the channel display on your TV, then enter the remaining two numbers using the number buttons.

Channel selection may also be performed by pressing CH up (^) or down (v).

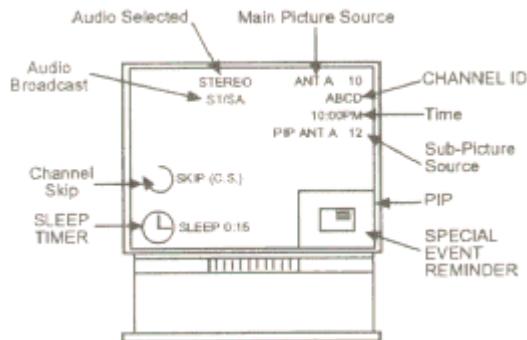
NOTE: The TV may not receive some channels if you are not in the correct SIGNAL SOURCE mode. (See page 35.)

11 EXIT button

When in MENU mode, this button will exit all On Screen Displays.

12 RECALL button

Press this button when no menu is displayed when you want to check the channel being received, the picture source, if the channel has stereo (ST) or second audio program (SAP), the time, CHANNEL ID, and if the SLEEP timer has been set.



Recall Illustration

13 MENU, CURSOR buttons

All the On-Screen Display features can be set or adjusted by using these buttons.

The MENU button will start the On-Screen Display.

The CURSOR buttons will highlight functions or adjust and set different features.

14 CHANNEL SKIP

Press this button when no menu is displayed and the TV will tune to the last channel viewed. The user can change channels "SURF" to any station they wish, and after 90 seconds, tune back to the original channel.

15 SLEEP button

Press this button to display the sleep timer in the lower left corner of the screen. Every subsequent press of this button will add 15 minutes to this timer, up to a maximum of three hours. Once set, use RECALL when you want to view time remaining (some models only). If the SLEEP button is pressed while the timer is set, it will reset to the original condition.

16 INPUT button

The INPUT button will select between both antenna signals and the three sets of video input jacks each time the button is pressed. If the Picture-in-Picture is on, the INPUT button will select between the three sets of video input jacks and both antenna sources when main channel is chosen with the PIP CH button. If the sub-picture is chosen, the INPUT button will select between the three sets of video input jacks and the ANT A antenna source (ANT B source cannot be displayed as a PIP sub-picture and COMPONENT: Y-CbCr Input 2 source will be displayed as a blank PIP Sub picture.)

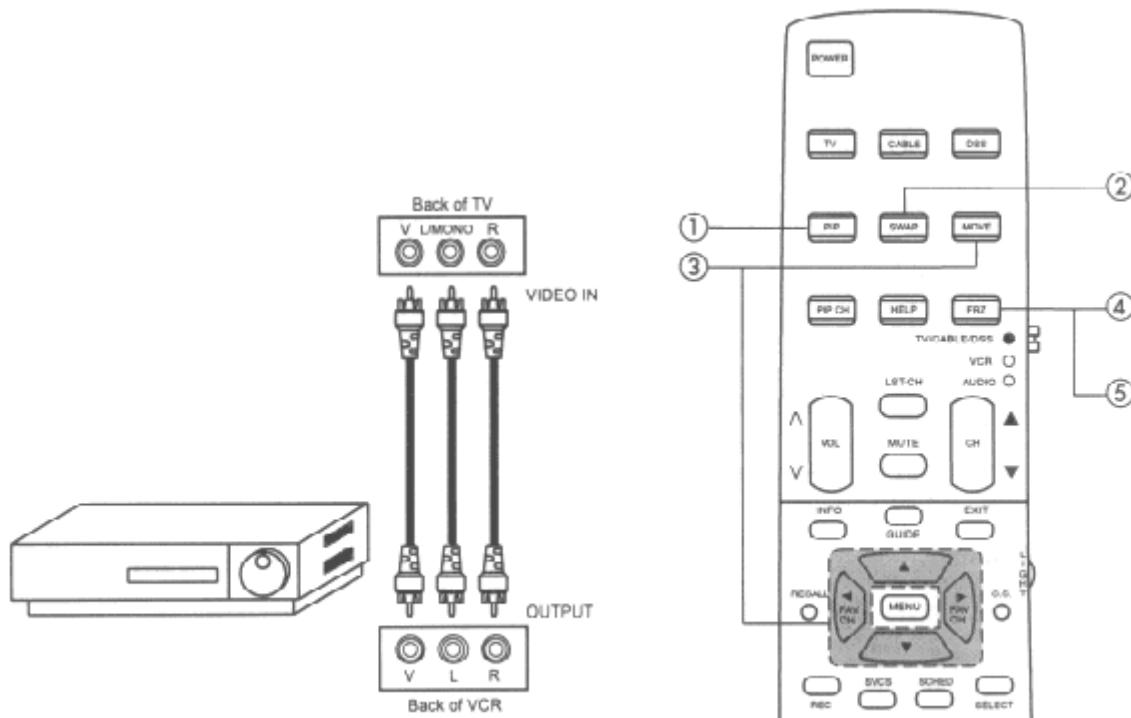
Input Illustration

PICTURE-IN-PICTURE (PIP)

Your Hitachi Projection TV incorporates Dual Tuner technology designed for improved viewing enjoyment. This Dual Tuner feature allows you to view antenna inputs on both the main picture and sub-picture simultaneously, with separate tuning control for each. The Dual Tuner can operate with only one input (ANT A only) or two inputs (ANT A and ANT B).

ANT A input can be viewed as both the main picture and sub-picture simultaneously. *ANT B and COMPONENT Y-CbCr input 2 sources can only be viewed as a main picture.* To select between main picture and PIP sub-picture tuning, press the PIP CH button on the remote. The blue highlight on the channel display will move with every press of the PIP CH button. When the blue highlight is on the top channel display, channel tuning is for the main picture. When the blue highlight is on the lower channel display, channel tuning is for the PIP sub-picture. This method of picture tuning is the same for one antenna input (ANT A only) and two antenna inputs (ANT A and ANT B).

The Picture-in-Picture feature is convenient when you want to watch more than one program at the same time. You can watch a TV program while viewing other programs from the ANT A source or any of the video inputs.



1 PIP button

Press the PIP button and a sub-picture will appear in one of the two different modes (SINGLE or SURF), depending on the last selection of the PIP mode. To change the PIP mode use the CURSOR \blacktriangle or \blacktriangledown buttons and the new selection will appear the next time the PIP function is used.

SINGLE MODE PIP:

Press the PIP button and a sub-picture appears in one corner of the screen. Press the button again to reduce the size of the sub-picture. Press the PIP button a third time to remove the sub-picture from the screen. Use the PIP CH button to select between main and sub-picture tuning control (indicated by green channel display.) Press the INPUT button when sub-picture channel tuning is being controlled, to change between VIDEO: 1, VIDEO: 2, VIDEO: 3, and ANT A antenna source. (ANT B source cannot be viewed as a sub-picture and COMPONENT: Y-CbCr Input 2 source will be displayed as a blank sub-picture).

PIP Example Illustration

NOTE: Since ANT B source cannot be viewed as a sub-picture, only single PIP mode is possible when ANT B is selected as the main channel.
When the COMPONENT: Y-CbCr Input 2 is selected as PIP, it will appear as a blank sub-picture.

PICTURE-IN-PICTURE CONT.

SURF MODE PIP

This feature will automatically scan all active channel numbers (those set in memory) and display them as PIP sub-pictures, along the right edge of the screen. Press the PIP button a second time to remove the sub-pictures from the screen.

PIP Surf Illustration

NOTE:

1. If no buttons are pressed when in SURF mode, auto-scanning will continuously scan.
2. If a channel is tuned during this SURF scanning, sub-pictures will be removed from the screen.

2 SWAP button

If you wish to switch what is being shown on the main picture to the sub-picture, press the SWAP button.

PIP Swap Illustration

NOTE:

1. The SWAP button will only operate when SINGLE PIP mode is chosen.
2. The SWAP function will not operate if ANT B input is set as the main channel (ANT B input cannot be displayed as a sub-picture.)

3 MOVE button

To move the sub-picture to another corner, press the MOVE button. The sub-picture moves one step counterclockwise every time the MOVE button is pressed. (Example below illustrates the MOVE operation for initial shipping conditions. If you have customized a PIP position, the MOVE operation may differ slightly from this example.)

PIP Move Illustration

It is also possible to customize the PIP position. To do this, wait until the On-Screen Display disappears (about eight seconds) and the use the CURSOR , , ,  buttons.

PIP Move Illustration

4 FREEZE (FRZ) button (With PIP ON)

If you wish to freeze the sub-picture, press the FRZ button. This is convenient when trying to write down the address for a mail order company, recording statistics for a sporting event, etc. To return the picture to motion, press the FRZ button again.

NOTE: The FREEZE function will only operate when SINGLE PIP mode is chosen.**5 FREEZE (FRZ) button (With PIP OFF)**

Press the FRZ button to freeze one or four frames of the picture, depending on the mode previously selected (SINGLE or STROBE). To change FREEZE modes, use cursor  or  to select which type of FREEZE mode you wish to view. The new selection will appear the next time the FREEZE function is used.

SINGLE FREEZE

Press the FRZ button to freeze one frame of the picture you are currently viewing. Press this button again or PIP to return to normal viewing.

Single Freeze Illustration

STROBE FREEZE

Press the FRZ button to freeze four frames of the picture you are currently viewing. Press this button again or PIP to return to normal viewing. This feature is useful for viewing a moving picture that has many details, for example, a close play in a sporting event or golf swing.

Strobe Freeze Illustration



CAUTION: A pattern burn may develop if the sub-picture is left in the same corner permanently. If the PIP feature is used frequently, occasionally MOVE the sub-picture to a different corner. You may also vary its position using the CURSOR , , , or  buttons.

NOTE:

1. Only sound from the main picture can be heard, unless you choose sub-picture audio from THEATER-WIRELESS SOUND mode and use the WIRELESS OUT outputs on the rear panel. (See page 55.)
2. Each freeze frame is delayed about 0.1 (1/10) second.
3. The FREEZE function will display blank sub-pictures when the COMPONENT Y-CbCr Input 2 source is set as main channel.

USING THE REMOTE TO CONTROL CABLE BOX/SATELLITE FUNCTIONS

- 21 -

Operating the precoded function for your VCR.

This remote is designed to operate different types of VCRs. You must first program the remote to match the remote system of your VCR. (Refer to page 30.)

1. Set the MULTI-PAGE select switch to VCR.
2. Turn ON your VCR.
3. Aim the remote control at the front of your VCR.
4. Hold down the PROG button on the remote, enter the two digit preset code that matches your VCR as shown on page 30. The remote will turn off your VCR when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your VCR. If the VCR does not turn off after five seconds, try a different two digit preset code.
5. The remote will now control your VCR.

NOTES:

1. If your VCR cannot be operated after performing the above procedures, your VCR's code has not been precoded into the remote.
2. In the unlikely event that your VCR cannot be operated after performing the above procedures, please consult your VCR operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.
4. If your VCR does not have a power function, the remote will issue the CHANNEL UP function.
5. The MENU button will act as the VCR MENU button for HITACHI VCRs.
6. The LST-CH button will act as your VCR ENTER button if required.
7. The SLEEP button will act as your VCR '100' button if required.
8. The REC button must be pressed two times to begin VCR recording. This button will also act as the VCR record button when the remote is in CABLE or DSS mode.

Remote Control Illustration.

1 PRECODED VCR buttons

These buttons transmit the chosen precoded VCR codes.

2 EXCLUSIVE TV buttons

These buttons are for operating the TV.

USING THE REMOTE TO CONTROL CABLE BOX/SATELLITE FUNCTIONS

Operating the precoded function for your cable/satellite box.

This remote is designed to operate different types of cable boxes and satellite systems. You must first program the remote to match the remote system in your cable/satellite box. (Refer to page 30.)

1. Set the MULTI-PAGE select switch to TV/CABLE/DSS.
2. Turn ON your cable/satellite box.
3. Press the CABLE button on the remote to switch to CABLE mode, or the DSS button to switch to DSS mode.
4. Aim the remote control at the front of your cable/satellite box.
5. Hold down the CABLE/DSS button on the remote, enter the two digit preset code that matched your cable/satellite box as shown on page 30. The remote will turn off your cable/satellite box when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your cable/satellite box. If the cable/satellite box does not turn off after five seconds, try another two digit preset code.
6. The remote will now control your cable/satellite box.

NOTES:

1. If your cable/satellite box cannot be operated after performing the above procedures, your cable/satellite box code has not been precoded into the remote.
2. In the unlikely event that your cable/satellite box cannot be operated after performing the above procedures, please consult your cable/satellite box operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the

USING THE REMOTE TO CONTROL AUDIO EQUIPMENT FUNCTIONS - 22 -

- remote control. After replacing the batteries repeat the entire programming procedure as stated above.
4. If your cable/satellite box does not have a power function, the remote will issue the CHANNEL UP function.
 5. The LST-CH button will act as your cable/satellite box ENTER button if required.
 6. The SLEEP button will act as your cable box '100' button if required.
 7. The INPUT button will act as the TV/DSS button when in DSS mode.

Remote Control Illustration.

1 PRECODED CABLE BOX buttons

These buttons transmit the chosen precoded cable codes.

2 PRECODED SATELLITE BOX buttons

These buttons transmit the chosen precoded satellite codes.

3 EXCLUSIVE TV buttons

These buttons are for operating the TV.

USING THE REMOTE TO CONTROL AUDIO EQUIPMENT FUNCTIONS

Operating the precode function for your audio equipment.

This remote is designed to operate certain types of audio equipment. You must first program the remote to match the remote system of your audio equipment. (Refer to page 30.)

1. Set the MULTI-PAGE select switch to AUDIO.
2. Turn ON the audio component you wish to control with your remote control (AMP, CD or TAPE).
3. Aim the remote control at the front of your audio equipment.
4. Hold down the button on the remote which corresponds with the component you wish to control (AMP, CD, or TAPE), enter the two digit preset code that matches your audio component as shown on page 30. The remote will turn off your audio component when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your audio component. If the audio component does not turn off after five seconds, try a different two digit preset code.
5. The remote will now control your audio component.
6. Repeat steps 2-5 until all audio equipment preset codes are programmed into the remote.

NOTES:

1. If your audio equipment cannot be operated after performing the above procedures, your audio component code has not been precode into the remote.
2. In the unlikely event that your audio component cannot be operated after performing the above procedures, please consult your audio components operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.
4. If your audio component does not have a power function, the remote will issue another obvious function that the audio component will respond to, such as CD open/close.
5. The default for AUDIO mode is AMP.
6. If you wish to control your Receiver or miscellaneous audio equipment, you must follow the remote programming procedure shown above. You may use only the AMP button to program these codes, but note that this button may not be used for more than one component.
7. The LST-CH button will act as your audio component's ENTER button if required.
8. The SLEEP button will act as your audio components '100' button if required.

Remote Control Illustration.

1 PRECODED AMP, CD, or TAPE buttons

These buttons transmit the chosen precode audio component codes.

2 EXCLUSIVE TV buttons

These buttons are for operating the TV.

AUDIO, CABLE/SATELLITE, AND VCR CODES

AMPLIFIER BRAND	CODE	AMPLIFIER BRAND	CODE	AMPLIFIER BRAND	CODE
--------------------	------	--------------------	------	--------------------	------

Aiwa	04, 05	Magnavox	00, 05, 08	Quasar	15
Carver	00, 05, 06, 07	Marantz	00, 05, 15	Realistic	08
Casio	08	MCS	15	Sansui	05
Clarinette	08	Modulaire	08	Sanyo	10
Denon	09	Onkyo	18	Sharp	14
Fisher	07, 10	Optimus	02, 03, 10, 14, 19	Sony	04
Hitachi	11	Panasonic	15	Technics	01, 15, 22, 23, 24
JVC	12	Penney	08	Victor	12
Kenwood	13, 14, 16, 17	Philips	00, 05	Wards	02, 04, 05, 07, 19, 20
Lloyd's	08	Pioneer	02, 03, 19, 20, 21	Yamaha	14, 25
				York	08

CABLE BRAND	CODE	CABLE BRAND	CODE	CABLE BRAND	CODE
ABC	00, 07, 08, 18, 19, 21, 37, 38, 53	Jasco	12	Signal	26, 56
Antronix	40	Jerrold	00, 08, 13, 38, 53, 55, 56	Signature	00
Archer	12, 25, 40	Macom	36	SL Marx	26
Belcor	33	Magnavox	16	Sprucer	01, 49
Cable Star	33	Memorex	02	Starcom	38, 53,
Century	12	Movie Time	30, 32, 34	Stargate	26, 56
Citizen	12	NSC	30, 34, 39	Starquest	56
Colour Voice	31, 45	Oak	22, 37, 50	Starsight	58, 59
Comtronics	26, 29	Panasonic	02, 10, 49	Sylvania	19
Contec	22	Paragon	02	Teleview	26
Dae Ryung	21	Philips	12, 16, 17, 27, 31, 43, 44, 45, 47	Texscan	19
Eastern	15	Pioneer	06, 11, 20	Tocom	07, 28, 55
Electricord	32	Popular Mechanics	57	Toshiba	02

Everquest	56	Pulsar	02	Tusa	56
Focus	57	RCA	49	TV 86	30
Garrard	12	Realistic	40	Unika	12, 40
GC Electronics	33, 40	Recoton	57	United Artists	37
Gemini	04, 39, 44, 56	Regal	03, 09, 23, 35	United Cable	53
General Instrument	00, 13	Regency	15	Universal	12, 25, 32, 33, 35, 40
Gold Star	11, 16	Rembrandt	00, 39	Videoway	51
Hamlin	03, 09, 14, 23, 24	Runco	02	Viewstar	16, 29, 30, 41
Hitachi	00	Samsung	11, 26	Zenith	02, 52, 60
Hytex	37	Scientific Atlanta	18, 21, 42, 48	Zentek	57

TAPE BRAND	CODE	TAPE BRAND	CODE
------------	------	------------	------

Aiwa	58, 59	Panasonic	54
Hitachi	47, 48, 49, 50	Pioneer	53
Jerrold	60, 61	Scientific Atlanta	62
JVC	51	Sony	55, 56, 58, 59
Kenwood	52	Starcom	60
Optimus	53	Wards	53

CD BRAND	CODE	CD BRAND	CODE	CD BRAND	CODE
Adcom	26	Krell	27	QED	27
Aiwa	27	Magnavox	27	Quasar	28
California Audio Lab	28	Marantz	27, 28	RCA	26, 33
Carver	27	MCS	28	Realistic	26
Denon	29	Mission	28	Rotel	27
DKK	30	NSM	27	SAE	27
Emerson	26	Onkyo	41	Sansui	27
Fisher	31	Optimus	30, 32, 42	Scott	26
Genexxa	32	Panasonic	28	Sony	30, 44

AUDIO, CABLE/SATELLITE, AND VCR CODES

- 25 -

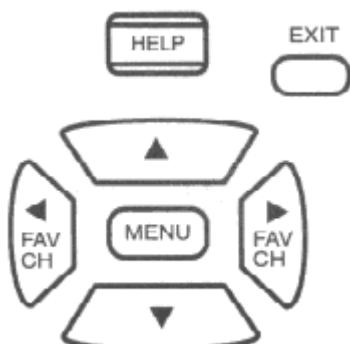
Hitachi	26, 32, 33, 34, 35, 36, 37	Philips	27	Technics	28, 45, 46
JVC	38	Pioneer	32, 42	Victor	38
Kenwood	31, 39, 40	Proton	27		
MISC BRAND	CODE	MISC BRAND	CODE	MISC BRAND	CODE
Aiwa	58, 59	Scientific Atlanta	62	Starcom	60
Jerrold	60, 61	Sony	58, 59		
RECEIVER BRAND	CODE	RECEIVER BRAND	CODE	RECEIVER BRAND	CODE
Aiwa	04, 05	Marantz	05, 15	Realistic	08
Carver	05, 06, 07	MCS	15	Sansui	05
Casio	08	Modulaire	08	Sanyo	10
Clarinette	08	Onkyo	18	Sharp	14
Denon	09	Optumis	10, 14, 19	Sony	04
Fisher	07, 10	Panasonic	15	Technics	15, 22, 23, 24
Hitachi	11	Penney	08	Victor	12
JVC	12	Philips	05	Wards	04, 05, 07, 19, 20
Kenwood	13, 14, 16, 17	Pioneer	02, 19, 20, 21	Yamaha	14, 25
Lloyd's	08	Quasar	15	York	08
Magnavox	05, 08				
DSS BRAND	CODE	DSS BRAND	CODE	DSS BRAND	CODE
Hitachi	61	RCA	62	Sony	63
VCR BRAND	CODE	VCR BRAND	CODE	VCR BRAND	CODE
Adventura	00	Jensen	01	Quartz	17
Aiko	08	JVC	01, 13, 26	Quasar	22
Aiwa	00	KEC	08, 23	Radio Shack	00, 23
Akai	01, 48, 49	Kenwood	01, 24, 26	Radix	23
American High	22	KLH	30	Randex	23
Asha	45	Kodac	22, 23	RCA	02, 03, 04, 35, 41, 47

Audiovox	23	Lloyd	00	Realistic	00, 17, 18, 19, 20 22, 23, 32, 45
Beaumark	45	Lloyd's	27	Ricoh	21
Bell & Howell	32	Logik	30	Runco	14
Brandt	43	LXI	23	Samsung	16, 45
Broksonic	33, 34, 42, 51, 52	Magnavox	14, 22, 29, 31, 35	Sankyo	14, 19
Calix	23	Magnin	45	Sansui	01, 26
Canon	22	Marantz	22, 31	Sanyo	17, 18, 32, 45
Capehart	06	Marta	23	Scott	15, 16, 33, 34, 37, 42
Carver	31	Matsushita	22	Sears	02, 04, 17, 18, 20 22, 23, 32, 46
CCE	08, 30	MEI	22	Sharp	19
Citizen	08, 23	Memorex	00, 14, 17, 18, 19 22, 23, 32, 45	Shintom	30
Colt	30	MGA	15, 48	Shogun	45
Craig	18, 23, 30, 45	MGN Technology	45	Singer	30
Curtis Mathes	01, 22, 47	Minolta	02, 04	Sony	07, 09, 21, 22
Cybernex	45	Mitsubishi	15, 26, 40, 48, 49	STS	02
Daewoo	06, 08, 16, 38, 50	Motorola	19, 22	Sylvania	00, 15, 22, 29, 31
Daytron	06	MTC	00, 45	Symphonic	00
Dynatech	00	Multitech	00, 30	Tatung	01
Electrohome	23	NEC	01, 05, 24, 26, 32	Teac	00, 01
Electrophonic	23	Nikko	23	Technics	22, 39
Emerex	07	Noblex	45	Teknika	00, 22, 23
Emerson	00, 08, 12, 15, 23, 27, 28, 33, 34, 37, 42, 48, 51, 52	Olympus	11, 22	Telefunken	43
Fisher	18, 20, 32, 46	Optimus	19, 23, 32	TMK	27, 45
Fuji	09, 22	Orion	51	Toshiba	15, 16, 20, 37
Funai	00	Panasonic	10, 11, 22, 39, 53	Totevision	23, 45

Garrard	00	Penney	02, 05, 22, 23, 24, 45, 46	Unitech	45
GE	03, 22, 41, 47	Pentax	02, 03, 04	Vector	16
Goldstar	23, 24, 44	Philco	22	Vector Research	05, 24
Gradiente	00	Philips	22, 29, 31	Video Concepts	05, 16, 48
Harley Davidson	00	Pilot	23	Videosonic	45
Harmon/ Kardon	24	Pioneer	26	Wards	00, 02, 18, 19, 22, 30, 35, 37, 45, 47
Harwood	30	Portland	06	XR-1000	00, 22, 30
Headquarter	17	Protec	30	Yamaha	24
Hi-Q	18	Pulsar	14	Zenith	09, 14, 21
Hitachi	01, 02, 03, 04	Quarter	17		

ULTRATEC OSD

1. Press MENU on the remote control to display the different features on your HITACHI Projection TV.
2. Press the CURSOR buttons to highlight a different feature.
3. Press EXIT on the remote control to quickly exit from a menu.
4. Press HELP on the remote control when a menu is displayed, and text will appear giving a description of that menu.



OSD Illustration



MENU LANGUAGE
PLUG & PLAY
SIGNAL SOURCE
AUTO CHANNEL SET

Choose English, French, or Spanish text.
Optimum hook up for your system.
Select Antenna or Cable TV.
First time set up for channel buttons.

CHANNEL MEMORY
CHANNEL LIST
CLOCK SET
MAGIC FOCUS

Channel buttons, add, skip.
Check channel name, scan, and child lock.
Set before using timer features.
Automatically match red, green, and blue colors to make white.



CHANNEL ID.
VIDEO ID.
FAMILY FAVORITES
CHILD LOCK
4 EVENT PROGRAM
AUTO LINK
CLOSED CAPTION
MENU BACKGROUND
FIRST TIME TOUR

Label channels PAY1, ABC, etc.
Label video inputs VCR1, LASER1, etc.
Allows you to set and view favorite channels.
Block channel picture and sound.
Turn TV on and off once, daily, or weekly.
Automatically turn TV on with any VIDEO input.
Feature to display dialogue/text.
Select from three types of backgrounds.
Introduces you to basic TV function.



CONTRAST
BRIGHTNESS
COLOR
TINT
SHARPNESS
RESET
ADVANCED SETTINGS

Adjust contrast.
Adjust brightness.
Adjust color.
Adjust tint.
Adjust sharpness.
Set VIDEO settings to factory preset.
Improve picture performance.



BASS
TREBLE
BALANCE
RESET
ADVANCED SETTINGS

Adjust bass.
Adjust treble.
Adjust balance.
Set AUDIO settings to factory preset.
Improve sound performance.



THEATER MODES

Picture and sound are automatically set.

**SRS
Wireless Sound**

Special sound effects.
Select from three types of audio for wireless output.

**SPECIAL EVENT REMINDER**

Set TV to remind you of birthdays, etc.

CALENDAR

Check day, month, year and special events.

AUTO HELP

Display a description of the current menu.

SET UP

Select INITIAL SETUP when setting your TV up for the first time. Use the CURSOR ▲ or ▼ on the remote to highlight the function desired.

Initial Setup Illustration

NOTE: To see an auto-demonstration of the on-screen displays with HELP text displayed, press and hold the POWER button on the TV set for approximately five seconds. Press the POWER button on the TV again to end the auto-demonstration.

MENU LANGUAGE

This feature will allow you to select any one of three different languages for all on-screen displays.

Menu Language Illustration

Use CURSOR ▲ or ▼ to select the MENU LANGUAGE of your choice.

Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

PLUG & PLAY

This graphic guide function will help you to properly set up your TV or Home Theater System. Simply answer two questions and a graphic will be displayed, showing you the optimum setup for your personalized system.

Plug & Play Help Screens

Press CURSOR ▲ or ▼ to highlight the correct answers to both questions.

Press CURSOR ► to display the graphic guide.

Press EXIT to quit menu or CURSOR ► to begin AUTO CHANNEL SET. (See page 36.)

SIGNAL SOURCE

Select ANTENNA if you are using an indoor or outdoor antenna. Select CATV if you have cable TV.

Signal Source Selection Menu

Press CURSOR ▲ or ▼ to highlight and select the correct SIGNAL SOURCE mode.

Press EXIT to quit MENU or CURSOR  to return to previous menu.

RECEPTION BAND		
AIR	CATV 1 or CATV 2	
	CATV CHANNEL	Indicated on the screen
VHF 2 ~ 13ch UHF 14 ~ 69ch	VHF 2 ~ 13	2 ~ 13
	Mid band A ~ I A-5 ~ A-1	14 ~ 22 95 ~ 99
	Super band J ~ W	23 ~ 36
	Hyper band W + 1 ~ W + 28	37 ~ 64
	Ultra band W + 29 ~ W + 84	65 ~ 125

Reception channels for each mode are shown at the left.

Refer to your cable or TV guide for channel identification standards.

If certain CATV channels are poor or not possible in CATV1 mode, set SIGNAL SOURCE to CATV2.

AUTO CHANNEL SET

This feature will automatically store active TV channels in CHANNEL MEMORY. This will allow you to skip over unused channels when using CHANNEL UP () or DOWN () buttons.

Auto Channel Set Menu

If the EXIT button is pressed while the AUTO CHANNEL SET function is engaged, programming will stop. If two antennas are connected, switch antenna inputs with the INPUT button and repeat AUTO CHANNEL SET for the second antenna input.

Remember to select the correct SIGNAL SOURCE mode before using AUTO CHANNEL SET for the second antenna input.

See CHANNEL MEMORY to add or erase additional channels.

CHANNEL MEMORY

Use this function after AUTO CHANNEL SET to add or erase additional channels to the remote control CHANNEL  or  buttons.

Channel Memory Menu

Add or erase additional channels while still in CHANNEL MEMORY using CURSOR  or  or the number buttons to change the channel.

Press EXIT to quit menu or CURSOR  to return to previous menu.

CHANNEL LIST

This function allows you to review which channels are labeled in CHANNEL ID (ID.) which have been added to CHANNEL MEMORY (SCAN), and which are protected by CHILD LOCK (LOCK).

Channel List Menu

Press CURSOR  or  to review more channels.

Press EXIT to quit menu or CURSOR  to return to previous menu.

NOTE: Each touch of CURSOR  or  will scan to the next eight channels.

CLOCK SET

The time must be set before you can use the CALENDAR, 4 EVENT PROGRAM, SPECIAL EVENT REMINDER or TV TIME OUT.

Clock Set Menu

Use CURSOR ▲ or ▼ to set the time, date, and year.

Press CURSOR ◀ or ▶ to change position.

Press EXIT to quit menu or CURSOR ◀ to return to previous menu when the CURSOR is in the first position.

MAGIC FOCUS

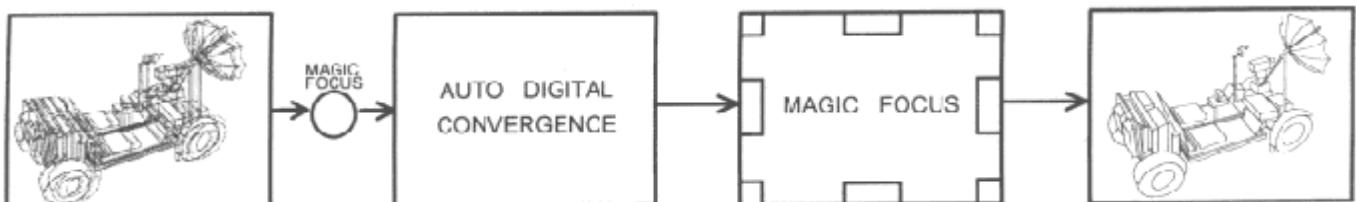
Your HITACHI Projection TV has three color projection tubes: one for red, one for green, one for blue. When mixed together in the proper proportion, the output of these three color tubes can produce any color. To produce these colors, however, the beams must be precisely aligned over each other so that the colors can be mixed. The process of aligning these picture beams is called "convergence".

Over a period of time, the picture tubes can drift out of alignment due to normal bumps and vibrations or moving the TV. If you move your TV, or if, after a time, you notice color rings or halos around objects in the picture, you may want to converge (align) the colors.

Properly converged, the lines appear white, which is actually a combination of the outputs of the three color tubes. The output of the green tube is stationary. The outputs of the red and blue tubes can be adjusted. When properly aligned, the outputs of all three tubes should be directly over each other to produce the white lines.

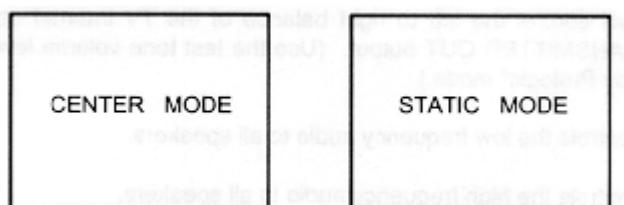
To simplify convergence, HITACHI incorporates a function called MAGIC FOCUS, which allows the TV to self-adjust. This process will take approximately 90 seconds. If this button is pressed during this 90 second period, no change in picture quality will occur. After this 90 second self-adjust period, picture quality will be optimum. (Do not move TV during self-adjust.)

To enter this self adjust mode, you may also select MAGIC FOCUS from the SETUP Menu. However, this will display a message prompting you to press the front panel MAGIC FOCUS button.



NOTE: Only a momentary press of the MAGIC FOCUS button is necessary to start AUTO DIGITAL CONVERGENCE. At anytime during this convergence correction process, you may press the MAGIC FOCUS button to exit the MAGIC FOCUS mode.

Do not press the MAGIC FOCUS button for more than 3 seconds. This is only for extreme cases of misconvergence and requires assistance from service. If one of the pictures shown below appears on the television screen, press the MAGIC FOCUS button a second time to exit this manual set up mode.





This selection contains advanced features which will make TV viewing easier and more enjoyable.

CHANNEL ID.

Use this feature to give up to 20 channels a name when ANTENNA signal source is selected and up to 60 channels a name when CATV1 signal source is selected.

Channel ID Illustration

Press CURSOR ▲ or ▼ to select letters.

Press CURSOR ◀ or ▶ to change character position.

Press CHANNEL ▲ or ▼ and the number buttons to select and label additional channels. The CHANNEL ID will now appear in the top right corner of the screen.

Press EXIT to quit menu or CURSOR ◀ to return to previous menu when the CURSOR is in the first position.

(*) represents a blank space.

Select ERASE ID to erase a CHANNEL ID.

NOTE: If ANT A and ANT B are in the same SIGNAL SOURCE mode (see page 35), the CHANNEL ID for both antenna inputs will be the same. CHANNEL ID will be displayed only when channel is displayed as main picture.

VIDEO ID.

Use this feature to give a name to any of the three video inputs.

Video ID Illustration

Press CURSOR ▶ to select the video input to be named.

Press CURSOR ▲ or ▼ to select letters.

Press CURSOR ▶ or ◀ to change position.

Press EXIT to quit menu or CURSOR ◀ to return to previous menu when the CURSOR is in the first position.

(*) represents a blank space.

Select RESET to set VIDEO ID to original condition.

NOTE: VIDEO ID will be displayed only when VIDEO input is displayed as main picture.

FAMILY FAVORITES (MENU)

This function allows you to group your favorite channels into six personalized categories that you can rename. A total of 24 channels for can be stored in the FAMILY FAVORITES function.

Family Favorites Menu

To enter a channel into a category, highlight to the left of the category title.

Press CHANNEL ▲ or ▼ or the number buttons to enter the desired channel. Repeat until category has been set with your favorite channels. The channel to be added is displayed in the top right corner of the screen.
Enter channel 00 to erase a favorite channel.

To rename the categories, use the CURSOR buttons to highlight the category you would like to rename.

Use CURSOR ▲ or ▼ to change a letter and CURSOR ► to select the next character to change.

To reset categories and channels back to original factory preset, press RECALL while you are renaming a category.

If a CHANNEL ID is set for the channel at the top of each column, it will be displayed above that column.

NOTE: This function cannot be accessed when ANT B is the main channel.

When the set is in a SIGNAL SOURCE different from ANT A, the message "PLEASE SWITCH TO ANT A" will appear.

FAMILY FAVORITES (OPERATION)

Use this function to display FAMILY FAVORITES selections as sub-pictures or to tune the main picture to a desired favorite channel.

Family Favorites Illustration

Select a category using CURSOR ▲ or ▼ buttons.

Press MENU and the category will be displayed as sub-pictures at the right edge of the screen. This is useful for previewing a category.

Use CURSOR ◀, ▶, ▲ or ▼ buttons to highlight a favorite channel and the TV will automatically tune to that channel.

Press EXIT to remove FAMILY FAVORITES OSD from the screen.

NOTE: If a category has some blank channel entries, these channels will appear as black sub-pictures.

CHILD LOCK

This function will block out the picture and sound of the selected channel or video input.

It can also be used to keep the TV from being viewed for a scheduled amount of time that you set.

The code to enter CHILD LOCK is a four digit key number. The factory preset code is 0000.

Use the number keys to select numbers.

Child Lock Menu

Use CURSOR ▲ or ▼ to highlight function and the CURSOR ► to set ON or OFF.

When CHANNEL is turned on, the picture and sound for the chosen channel will be blocked out.

When VIDEO LOCK is turned on, the picture and sound for all video inputs will be blocked out. To lock the video inputs, you must be tuned to any video input.

When QUICK LOCK is turned on, the picture and sound for channels 3, 4 on both ANT A/B and all video inputs will be blocked out.

When FRONT PANEL LOCK is turned on, all buttons on the front panel will be deactivated, except the Power button.

When TV TIME OUT is turned on, you can set the BEGIN and END times and the TV cannot be viewed during that time period. (Set clock first.) Use CURSOR ▲ or ▼ to highlight ONCE (TV will time out one time only), DAILY (TV will time out every day), or WEEKLY (TV will time out one time a week) and then press CURSOR ► to select your choice.

To change the key number, select CHANGE SECRET CODE. Enter a new four digit key number you prefer.

If you forget your key number, use the factory code 7777 to erase your key number. This will reset the key number back to the factory preset 0000.

NOTE:

1. If ANT A and ANT B are in the same SIGNAL SOURCE mode (see page 35), when a channel is locked, it is locked on both antenna inputs.
2. When using TV TIME OUT make sure the clock is set (see page 39).
3. When the recall button is pressed, a special icon appears on the and indicates that CHILD LOCK is activated.

4 EVENT PROG.

This function will automatically turn the TV on and off, one time only, every day or once a week.

4 Event Program Menu

Press CURSOR **▶** to select PROGRAM 1, 2, 3 or 4.

Press CURSOR **▲** or **▼** to select the time the TV will turn on and off.

Use CURSOR **▶** to change position.

Press CURSOR **▲** or **▼** to highlight then CURSOR **▶** to select MODE: ONCE (TV will turn on/off one time only) or MODE: DAILY (TV will turn on/off at the same time every day), or MODE: WEEKLY (TV will turn on/off at same time every week).

Press CURSOR **▲** or **▼**, CHANNEL (**▲**) or (**▼**), or number buttons to set the channel the TV will tune to when it automatically turns on.

If the clock is not set, you can not use this function and the screen below will appear.



NOTE:

1. The OFF Timer will only activate if the TV was turned on or tuned with the ON timer and no channel selection was made after this time. If you change the channel after the ON Timer has been activated, the OFF Timer will deactivate.
2. If no remote control button is pressed after ON Timer is activated, the TV will automatically turn off after three hours.



CAUTION: Do not use your TV as a deterrent when away from home by using the ON and OFF TIMERS. For safety, the TV should be turned off when you are away from home.

AUTO LINK

Use this function to automatically turn the TV on and tune to VIDEO: 1, 2, or 3, when it detects a VIDEO input.

AUTO LINK Illustration.

Use CURSOR **▶** to select video input.

Use CURSOR **▲** or **▼**, then CURSOR **▶**, to change AUTO LINK setting.

When AUTO is selected, the TV will turn on and tune to VIDEO: 1, 2, or 3 automatically, when a VIDEO: 1, 2, or 3 input is turned on. This is convenient when you want to watch a movie with your VCR or laserdisc player, or DVD player.

When REMOTE is selected, the TV will turn on and tune to VIDEO: 1, 2, or 3 automatically, when a VIDEO: 1, 2, or 3 input is detected and the VCR or laserdisc play button on your remote control is pressed.

This is convenient when you want to record a movie with your VCR and watch it later.

Select OFF to disable this function.

Press EXIT to quit menu or CURSOR to return to previous menu.

- NOTE:**
- Once the TV has been turned on using the AUTO LINK feature, it must be reset before AUTO LINK is used again. To do this, turn your VCR, laserdisc, or DVD player OFF. This feature is now reset and will turn on your TV as described above.
 - When using REMOTE mode, any remote control button will substitute for your video input device play button. However, intended operation is for use with your VCR, or DVD play button.

CLOSED CAPTION

Closed captions are the dialogue, narration, and/or sound effects of a television program or home video which are displayed on the TV screen. Your local TV program guide denotes these programs as or .

Closed Caption Illustration

DISPLAY: ON/OFF will turn the display on or off.

MODE: C.C. (Closed Caption) is for the program you are viewing.

TEXT is for additional information such as news reports or a TV program guide. This information covers the entire screen and viewing the TV program is not possible. TEXT

may not be available with every program.

CHANNEL: 1 is used for the primary language (usually English).

CHANNEL: 2 is sometimes used for a second language (may vary by region).

Use CURSOR or to highlight the function to change then press CURSOR to change the function.

Press EXIT to quit menu or CURSOR to return to previous menu.

- NOTE:** If you do not have sound, make sure MUTE is not set.

MENU BACKGROUND

This function allows you to choose from three menu backgrounds.

Menu Background Illustration.

Use CURSOR or to change MENU BACKGROUND setting.

Press EXIT to quit menu or CURSOR to return to previous menu.

Select CLEAR and no background is visible, select GRAY and a gray background is visible (no picture can be seen behind menu screen), select SHADED and a light background is visible.

FIRST TIME TOUR

This function introduces you to the First Time Tour Setup Feature, showing you basic TV functions as well as helping you set up your TV or Home Theatre System. This feature will be displayed every time your TV is turned on, unless you set FIRST TIME TOUR to OFF.

First Time Tour Illustration

To disable this function, press the Menu button at any time during the tour, and the following screen will appear.



Use CURSOR ▲ or ▼ then CURSOR ► to select ON or OFF.

Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

NOTE: 1. When TV set is turned on, the First Time Tour will always appear if it is set to ON.
2. To exit during the First Time Tour, press the MENU button.

VIDEO

Select VIDEO to adjust picture settings and improve picture quality.

Video Settings Menu

Use the CURSOR ▲ or ▼ buttons to highlight the function to be adjusted.

Press the CURSOR ◀ or ► to adjust the function.

Press EXIT to quit menu.

NOTE:

- If CONTRAST is selected, you are adjusting CONTRAST. The additional menu items BRIGHTNESS, COLOR, TINT, and SHARPNESS can be selected and adjusted in the same manner.
- Contrast and Brightness adjustments will affect only the main picture. These adjustments will not affect the sub-picture.

CONTRAST

Use this function to change the contrast between black and white levels in the picture. This adjustment will only affect the picture when ADVANCED SETTINGS ULTRA AI is OFF. (See page 50.)

BRIGHTNESS

Use this function to adjust overall picture brightness.

COLOR

Use this function to adjust the level of color in the picture.

TINT

Use this function to adjust flesh tones so they appear natural. (It may be necessary to adjust TINT to obtain optimum picture quality when using the COMPONENT: Y-CbCr Input 2 jacks).

SHARPNESS

Use this function to adjust the amount of fine detail in the picture.

RESET

When RESET is selected, press CURSOR **►** to return video adjustments to factory preset conditions.

ADVANCED SETTINGS

Your HITACHI Projection TV has an Ultra AI (Artificial Intelligence) function which will automatically adjust picture settings to produce the highest quality picture possible.

When AI is highlighted, use CURSOR **►** to turn the AI on or off.

Advanced Video Settings Menu

Use CURSOR **▲** or **▼** to select function.

Use CURSOR **►** to change the function setting. When the function has an "X" in the box, it is ON.

Press EXIT to quit menu or CURSOR **◀** to return to previous menu.

ULTRA AI (ARTIFICIAL INTELLIGENCE)

When the AI function is on, the TVs' internal computer will perform the following:

1. Automatically monitor and adjust contrast depending on room lighting (sensor is located in the front panel) to produce a more natural picture.
2. Automatically monitor and adjust color levels and maintain natural flesh tones.
3. Automatically compensate for weak or strong TV signals to produce a clear picture.

Turn the AI function off to control other PREFERENCE SETTINGS.

AUTO COLOR

The AUTO COLOR function automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes. It also maintains natural flesh tones while preserving fidelity of background colors. (This function will automatically set to on and cannot be turned off when the ULTRA AI function is ON.)

NOTE: It may be necessary to set AUTO COLOR-ON to obtain optimum picture quality when using the
COMPONENT: Y-CbCr Input 2 jacks

NOISE REDUCTION

The NOISE REDUCTION function automatically reduces conspicuous noise in the picture without degrading picture quality. (This function will automatically set to on and cannot be turned off when the ULTRA AI function is ON.)

SUPER CONTRAST

Turn on SUPER CONTRAST to improve picture detail in areas of high brightness.

COLOR TEMPERATURE

Set this to WARM for hotter colors with more red, or set to COOL for less intense colors with more blue.

AUDIO

Select **AUDIO SETTINGS** to adjust the TV to your preference and to improve the sound quality.

Audio Settings Menu

Use CURSOR ▲ or ▼ to highlight the function to be adjusted.

Press CURSOR ◀ or ▶ to adjust the function.

Press EXIT to quit menu.

NOTE: If BASS is selected you are adjusting BASS. The additional menu items TREBLE and BALANCE can be selected and adjusted in the same manner.

BASS

This function controls the low frequency audio to all speakers.

TREBLE

This function controls the high frequency audio to all speakers.

BALANCE

This function will control the left to right balance of the TV internal speakers, the AUDIO TO HI FI output, and WIRELESS OUT output, and the Surround Speakers.

RESET

When RESET is selected, press CURSOR ▶ to return audio adjustments to factory preset conditions.

ADVANCED SETTINGS

Use ADVANCED SETTINGS to improve the sound performance of your TV, depending on listening conditions.

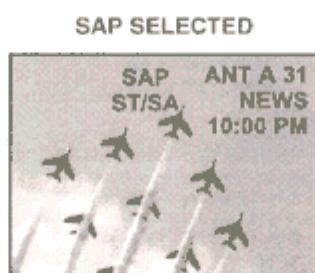
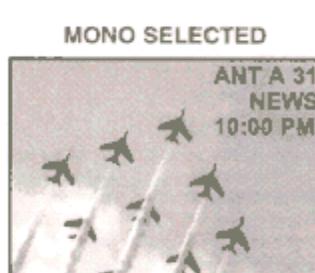
Advanced Audio Settings Menu

Press CURSOR ▲ or ▼ to highlight a function. Press CURSOR ▶ to change the function setting. When the function has an "X" in the box, it is ON.

MTS MODE

Multi-Channel Television Sound will allow you to select STEREO (a stereo broadcast), MONO (monaural sound) used when receiving a weak stereo broadcast or SAP (second audio program) which may be a secondary language, weather report, etc.

The sources received will be displayed at the top center edge of the TV. The source you select will be displayed above the sources received. See example below for each selection when both stereo and second audio are received (monaural is always received).

STEREO SELECTED**SAP SELECTED****MONO SELECTED**

INTERNAL SPEAKERS

This function is useful when first setting up the external speakers, or if you prefer to use only speakers from a separate stereo system.

AUTO NOISE CANCEL

This function eliminates the noise between stations. If a channel is tuned and is noisy, this function will automatically eliminate the audio for that channel.

LOUDNESS

This function will improve the quality of both low and high frequency sounds when listening at low volume levels.

PERFECT VOLUME

This function will automatically adjust volume so each channel has the same average volume level.

DYNAMIC BASS

This function allows you to enjoy spectacular bass sound that would normally be heard only with expensive home speaker systems.

THEATER

Use this function to choose picture settings for a true home THEATER experience.

THEATER MODES

Use this function to choose from automatic picture settings to optimize your TV's performance.

Theater Modes Menu

Use CURSOR ▲ or ▼ to change THEATER MODES settings.

When TV mode is chosen, the following are automatically set:

Contrast almost maximum, Super Contrast-OFF, Color Temp.-Cool, Loudness-ON, Perfect Volume-ON, Dynamic Bass-ON.

When MOVIE mode is chosen, the following are automatically set:

Contrast almost center, Super Contrast-OFF, Color Temp.-Warm, Loudness-OFF, Perfect Volume-OFF, Dynamic Bass-OFF.

When SPORTS mode is chosen, the following are automatically set:

Contrast-Maximum, Super Contrast-ON, Color Temp.-Cool, Loudness-OFF, Perfect Volume-OFF, Dynamic Bass-OFF.

You can customize each of the above modes (TV, MOVIE, and SPORTS) to your preference to increase viewing performance and pleasure, depending upon the video program being viewed. However, if RESET is selected, all modes will reset to the initial conditions as explained above.

When RESET is selected, it will take approximately two seconds to return to factory conditions (SPORTS mode).

Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

SRS (•)

Based on the principles of the human hearing system, SRS technology delivers an exciting and realistic 3D Sound experience from just two speakers (or) the two internal speakers of your HITACHI television. If your HITACHI television is connected to an external audio system, SRS will also create an incredible 3D sound experience from two speakers and even enhance a complete multi-speaker surround sound system.

Surround Sound Settings Menu

Use CURSOR ▲ or ▼ then CURSOR ► to set SRS ON or OFF.

Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

NOTE: SRS, the SRS symbol and sound Retrieval System are registered trademarks of SRS Labs, Inc. in the U.S. and selected countries. SRS Technology is manufactured under license from SRS Labs, Inc. and is protected by USA patents 4,748,669 and 4,841,572 and additional patents worldwide.

WIRELESS SOUND

This feature allows you to choose between three possible variable audio outputs for a separate set of wireless speakers or another stereo amplifier. The audio output may be either MAIN TV AUDIO, PIP AUDIO or REAR SPEAKERS.

Wireless Sound Illustration

Press CURSOR ▲ or ▼ to highlight a function.

Press CURSOR ► to select the function.

Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

MAIN TV AUDIO

When set to MAIN TV AUDIO mode, your wireless speakers will play the same audio program as played on your TV. The volume of your wireless speakers will be controlled by the TV volume control.

PIP AUDIO

When set to PIP AUDIO mode, your wireless speakers will play the PIP sub-picture audio program. The volume of your wireless speakers will now be controlled by the PIP VOL. control, which may be varied from 00 (min.) to 100 (max.). If no sub-picture is displayed, the wireless speakers will play the main channel audio program with the volume being controlled by the TV volume control.

INFO

This function allows your TV to assist you with your busy day-to-day schedule.

SPECIAL EVENT REMINDER

Use this function to set up to six special events into memory.

These events can then be viewed in CALENDAR mode.

Special Event Reminder Illustration

Press CURSOR ► to select EVENT 1 to 6.

Press CURSOR ▲ or ▼ to select a letter.

Press CURSOR ► to change position.

Set Special Day of reminder using cursor buttons.

Highlight the day of Start Reminder using CURSOR buttons, then press CURSOR ► to select.

To erase SPECIAL EVENT, select ERASE EVENT then press CURSOR ► .

Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

If the clock is not set, you can not use this function and the next screen will appear.



- NOTE:**
1. When the TV is turned on, the SPECIAL EVENT REMINDER message will automatically appear at the selected time.
 2. Each special event message can be a maximum of 20 characters.
 3. When the RECALL button is pressed, a special icon appears on the right bottom side of the screen and indicates a SPECIAL EVENT REMINDER message. Press the RECALL button again to display the SPECIAL EVENT REMINDER message.

CALENDAR

Use this function to check the day, month, and year.

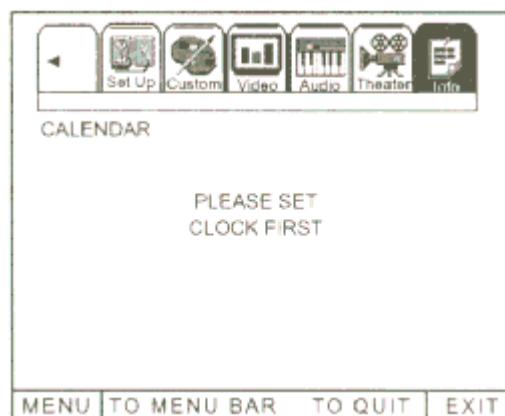
Dates programmed in SPECIAL EVENT REMINDER will appear blinking and special event message will be displayed.

Calendar Illustration

Press CURSOR ▲ or ▼ to change the month.

Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

If the clock is not set, you can not use this function and the next screen will appear.



- NOTE:**
1. Dates of SPECIAL EVENT REMINDER will appear blinking. Special event message will be displayed only if current date is within the day of Start Reminder Specifications as chosen in SPECIAL EVENT REMINDER. (See page 56.)
 2. A special icon appears next to "CALENDAR" when a Special Event Reminder is set.

AUTO HELP

Use this function to display a description of the current menu.

Auto Help Illustration

Press CURSOR ▲, ▼ to select ON or OFF.

Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

NOTE: You can also turn this function ON and OFF by pressing the HELP button on the remote control.

CARE OF YOUR HITACHI PROJECTION TV AND YOUR REMOTE CONTROL

DO

Dust the screen and cabinet with a soft cloth.

Clean the screen with a soft cloth moistened in warm water and dry with a soft cloth. A mild soap may be used if the screen is extremely dirty.

Place your television away from extreme heat, humidity and extremely dusty places.

Remove the plug from the wall outlet if your television will not be used for a long period of time, for instances, when you go on vacation.

DO NOT

Do not clean your screen or cabinet with strong cleaners, polishes or a chemically treated cloth.

Do not place rubber or vinyl products or cellophane tape on your set.

Do not touch the screen too often.

Do not subject the remote control to shocks such as dropping it on the floor, etc. Physical damage to the precision parts may result.

Avoid placing the remote control in a high humidity place or getting it wet. Do not leave it on or near a heater.

Excessive heat or moisture may cause the unit to cease operation.

When the batteries run down, remote control operation will become erratic or possibly stop altogether.

Replace the old batteries with two new "AA" size batteries.

Exposure of the viewing screen to prolonged direct sunlight or heat may cause the screen to permanently warp, resulting in a distorted picture.

RECEPTION PROBLEMS



• IGNITION NOISE:

Black spots or horizontal streaks may appear, picture may flutter or drift. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills and other electrical appliances.



• GHOSTS:

Ghosts are caused by the television signal following two paths. One is the direct path and the other is reflected from tall buildings, hills or some other objects. Changing the direction or position of the antenna may improve reception. Ghosting may also be caused by defects in the antenna system such as unshielded leads or connecting several sets to the same antenna without using multiple antenna couplers.

**• SNOW:**

If your receiver is located in the fringe area of a television station where the signal is weak, your picture may be marred by the appearance of small dots. When the signal is extremely weak, it may be necessary to install a special antenna to improve the picture.

**• RADIO FREQUENCY INTERFERENCE:**

The interference produces moving ripples or diagonal streaks, and in some cases, causes loss of contrast in the picture.

NOTE: The TV set can generate sound distortion in external devices such as a radio. Please separate radio equipment from the TV set to a considerable distance.

USEFUL INFO

Troubleshooting Chart

HITACHI Projection Television incorporates advanced power surge protection technology designed to protect against component or circuit damage due to external or internal voltage power surges.

IF YOUR TELEVISION SHOULD APPEAR TO HAVE A LOSS OF POWER, PLEASE FOLLOW THIS PROCEDURE:

- 1) Press the power switch (ON/OFF switch) once.
- 2) If there is still no power, wait 30 seconds and push the power switch again.
- 3) If there is still no power, unplug the power cord from the wall. Wait thirty seconds and plug the power cord back in. Push the power switch again.

This protective technology should provide for years of lasting entertainment from your HITACHI Projection Television.

Features:

- Superfine Picture Quality
1000 Line Horizontal Resolution
- Pure Green and Red Filter Lenses
- Artificial Intelligence System
- Remote (Controls many VCR brands, cable boxes, satellite boxes, and other audio equipment.)
- High Definition On-Screen Display (UltraTEC BIT-MAP)
- ON SCREEN PLUG and PLAY guide
- Full Set of Input Jacks, including S-Video
- COMPONENT: Y/Cb/Cr Input Jacks
- Closed Caption Decoder
- High Resolution Picture-In-Picture with Freeze
- Tunes Port Bass Reflex Speakers
- Magic Focus (Auto Digital Convergence)
- Dual Antenna Inputs
- Auto Link
- **SRS (•)**

Inputs:

- Power Input.....AC 120V, 60Hz
- Power Consumption (operating)

50UX58B/58K.....	157W
55UX58B.....	157W
60UX58B/58K.....	157W
- Power Consumption (Maximum)

50UX58B/58K.....	192W
55UX58B.....	192W
60UX58B/58K.....	192W
- Antenna input impedance.....75 Ohm
- Channel coverage.....181 ch.

VHF-Band.....	2 ~ 13
UHF-Band.....	14 ~ 69
CATV Mid Band.....	A-5 ~ A-1,A-1
Super Band.....	J-W
Hyper Band.....	W+1 - W+28
Ultra Band.....	W+29 - W+84
- Video.....1.0Vp-p, 75 Ohm
- S-Video

Luminance (Y).....	1.0Vp-p, 75 Ohm
Chrominance (C).....	0.286Vp-p, 75 Ohm
- Audio input level.....47k Ohm
- Average input level.....470mVrms
- Component Video

Luminance (Y).....	1.0Vp-p, 75 Ohm
Chrominance (Cb,Cr)....	0.7Vp-p, 75 Ohm

Outputs:

- Video.....1.0Vp-p, 75 Ohm
- Audio.....470mVrms, 1k Ohm

Dimensions:	50UX5 8B	50UX5 8K	55UX5 8B	60UX5 8B	60UX5 8K
• Height (in.)	51 15/16	51 13/16	56 11/16	60 7/16	60 7/16
• Width (in.)	43 9/16	43 3/8	47 1/4	51 11/16	51 3/8
• Depth (in.)	24 3/4	24 5/8	29 7/16	27 1/16	26 3/8
• Weight (lbs.)	190	190	267	308	288

NOTE: Due to improvements, specifications in this operating guide are subject to change without notice.

HITACHI SERVICE HOTLINE

To locate an authorized HITACHI service facility in the continental U.S.A. and Canada,

DIAL TOLL FREE

7 days a week, 24 hours a day

800 HITACHI**(1-800-448-2244)****Hitachi Home Electronics (America), Inc.**

Hitachi has made every effort to assure you hours of trouble free operation from your unit. However, should you require service, a network of Hitachi Authorized Service Facilities has been established in all 50 states and Puerto Rico. Each facility will provide you with convenient and expedient assistance. Our service hotline operator will direct you to the Hitachi Authorized Service Facility nearest you. Just present proof of purchase and/or delivery receipts to the Hitachi Authorized Service Facility, and service will be rendered in accordance with the terms of the limited warranty as stated on your warranty card or operating guide.

Should you have any questions regarding warranty, service, operation, or technical assistance, please contact:

Hitachi Home Electronics (America), Inc

3890 Steve Reynolds Blvd
Norcross, GA 30093
Tel: 770-279-5600

Hitachi Sales Corporation of Hawaii

3219 Koapaka St.
Honolulu, HI 96819
Tel: 808-836-3621

For TV's purchased in Canada only, please contact one of the Hitachi offices below, should you have any questions regarding service, operation, or technical assistance.

MONTREAL

9425 Trans Canada
Saint-Laurent, Quebec
H4S 1V3
Tel: (514) 956-9882
Fax: (514) 956-9761

TORONTO

6740 Campobello Road 20800 Westminster Hwy., Unit 1103
Mississauga, Ontario
L5N 2L8
Tel: (905) 821-4545
Fax: (905) 826-6627

VANCOUVER

Richmond, B.C.
V6V 2W3
Tel: (604) 214-0777
Fax: (604) 214-0772

Back Cover

HITACHI

QR21061

WARRANTY**HITACHI PROJECTION TV LIMITED WARRANTY**

Hitachi Home Electronics (America), Inc. Hitachi Home Electronics (America) Inc. and
Hitachi Sales Corporation of Hawaii ('Hitachi') Sales Corporation of Hawaii ('Hitachi')
warranty this

component in duration as stated below:

- Lifetime Lens
- 2 Years CRT
- 30 Days Screen
- 1 Year Parts
- 1 Year Labor

Conditions of Hitachi Limited Warranty

Hitachi Projection Television are warranted to be free of defects in parts and workmanship from the time of purchase by the original owner. If this product is found to be defective, Hitachi will repair or replace defective parts at no charge for the parts to the original owner, subject to the conditions of the Limited Warranty. The labor for the repair or replacement of the defective parts will be provided by Hitachi without charge, subject to the condition of the Limited Warranty.

1. PARTS- The warranty periods are: Lifetime on the main optical lens, two (2) years on the CRTs, thirty (30) days on the screen, and one (1) year on the remaining parts from the date of original purchase.
During the applicable limited warranty period for the parts, defective parts will be replaced at no charge for the part. Parts used for the replacement will be warranted for the remainder of the original warranty period for that part.
2. LABOR- For a period of thirty (30) days from the date of purchase, Hitachi will repair or replace the screen if it proves to be defective without charge of labor. For all other parts, Hitachi will provide the labor for warranty repair at no charge for the period of one year from date of original purchase. Except for the screen as noted above, the labor service during this one (1) year period includes (at Hitachi's option) either in-home repair or free pick-up and delivery.
3. Owner must provide verification of the date of purchase when requesting Limited Warranty Service.
(Dated sales receipt required.)
4. All repairs must be performed by a Hitachi Authorized Service Facility. For information concerning repairs, operation, technical assistance or for obtaining the location of the nearest Hitachi Authorized Service Facility or Parts Distributor, please call the number below.

1-800-HITACHI (1-800-448-2244)

For information on accessories or extended service plans, please call 1-800-995-4500.

Hitachi Home Electronics (America), Inc.
3890 Steve Reynolds Blvd.
Norcross, GA 30093
Tel: 1-770-279-5600

Hitachi Sales Corporation of Hawaii
3219 Koapaka St.
Honolulu, HI 96819
Tel: 1-808-836-3621

H462161

Warranty Limitations

The Limited Warranty provided by Hitachi does not cover:

- A. Antenna, cabinet, cabinet parts, knobs, batteries, and accessories.
- B. Screens that have been cleaned with anything other than water and mild soap solution.
- C. Lenses from units that have sold or transferred from the original purchaser. Any lens element that is

permanently attached to the CRT assembly is excluded from the lifetime warranty. The labor charges to repair or replace will be at no charge during the one (1) year warranty duration. Labor charges to repair or replace lenses found to be defective after the one (1) year warranty duration will not be

covered.

D. Any new product purchased or service performed outside continental United States or its possessions.

E. Uncrating, setup, installation, or adjustments of customer operated controls.

F. Repairs done or parts supplied by a service facility not authorized by Hitachi.

G. Any defect, malfunction, or failure caused by or resulting from improper service, maintenance, repair, or

from abuse, neglect, accident or any other cause beyond the control of Hitachi.

H. Any product on which the serial number has been removed, altered replaced, defaced or rendered illegible.

I. Any product used for commercial or industrial purpose.

J. Any unit that has been sold or transferred from the original owner.

This Limited Warranty is made only to the original consumer purchaser of this Hitachi Projection TV and is effective only upon presentation of evidence of provable date of purchase.

NO PERSON, AGENT, DISTRIBUTOR, SERVICE FACILITY, OR COMPANY IS AUTHORIZED TO CHANGE, MODIFY OR AMEND THE TERMS OF THIS LIMITED WARRANTY IN ANY MATTER OR FASHION WHATSOEVER. EXCEPT AND TO THE EXTENT PROVIDED IN THIS LIMITED WARRANTY, HITACHI MAKES NO EXPRESS WARRANTY REGARDING THIS HITACHI PRODUCT. FURTHER, ALL IMPLIED WARRANTIES RELATED TO ANY PORTION OF THIS PRODUCT, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THE APPLICABLE EXPRESS WARRANTY CONTAINED ABOVE. HITACHI SHALL NOT BE LIABLE TO THE PURCHASER OR TO ANY OTHER PERSON FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE OR LOSS OF PROFIT OR PRODUCT RESULTING FROM ANY DEFECT IN OR MALFUNCTION OR FAILURE OF THIS HITACHI PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Important Notice:

Retain your sales receipt for warranty purposes. Please complete the section below for your records, as it may be needed in event of loss.

HITACHI
PROJECTION TV
LIMITED WARRANTY REGISTRATION
(For your record - Attach sales receipt to this card)

Model No.

Serial No.

Dealer Name

Date of Purchase

Dealer Address

City

State

Zip

**"IMPORTANT"
PLEASE**

COMPLETE YOUR
WARRANTY
REGISTRATION
CARD
AND MAIL
TO HITACHI

HITACHI

In order to allow Hitachi to better serve customer needs, please complete this card and return it to Hitachi Home Electronics (America), Inc. Completion of this card is not required in order to validate your Hitachi Limited Warranty, but would assist us in developing better services for our customers.
(Please print or type)

Model

Serial No.

Date of Purchase

Customer Name

Customer Address

City

State

Zip

()

Phone

Dealer Name

Dealer Address

City

State

Zip

1. Did you purchase a service contract for this product?
 Yes No
2. Are you interested in obtaining information about Hitachi's Extended Service Program?
 Yes No
3. Are you interested in obtaining information about accessories?
 Yes No

ⁱThis is a misprint in the manual. This should read VIDEO OUT of the VCR. With the connection described in the manual. The caller may get a buzzing noise.

ⁱⁱThis is suppose to read VIDEO OUT of the VCR.
This is a misprint in the manual.